



## Complete Summary

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### TITLE

Hypertension: percent of eligible patients with an active diagnosis of hypertension whose most recent blood pressure (BP) recording was BP less than or equal to 140/90 (NEXUS clinics cohort).

### SOURCE(S)

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

## Measure Domain

### PRIMARY MEASURE DOMAIN

#### Outcome

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

### SECONDARY MEASURE DOMAIN

Does not apply to this measure

## Brief Abstract

### DESCRIPTION

This measure assesses the percent of eligible patients with an active diagnosis of hypertension whose most recent blood pressure (BP) recording was less than or equal to 140/90.

### RATIONALE

High blood pressure affects about 50 million Americans and 1 billion people worldwide. According to recent estimates, one in four U.S. adults has high blood pressure, but because there are no symptoms, nearly one-third of these people don't know they have it. This is why high blood pressure is often called the "silent killer." Uncontrolled high blood pressure can lead to stroke, heart attack, heart

failure, or kidney failure. The only way to tell if you have high blood pressure is to have your blood pressure checked.

The National High Blood Pressure Education Program Coordinating Committee recently issued the Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC VII). According to the report, new recommendations for tighter control of high blood pressure may drastically reduce the number of individuals who die each year from hypertension-related illnesses. The report further states that the relationship between blood pressure and risk of cardiovascular disease events is continuous, consistent, and independent of other risk factors. The higher the blood pressure becomes, the greater the chance of heart attack, heart failure, stroke, and kidney disease. The guidelines highlight 4 basic strategies: pay attention to blood pressure before it is high; in people over age 50, systolic pressure is more important than diastolic; two (or more) drugs are better than one for most patients; and build trusting clinician/patient relationships that motivate patients to be healthy.

#### PRIMARY CLINICAL COMPONENT

Hypertension; good control (blood pressure [BP] less than or equal to 140/90 mm Hg)

#### DENOMINATOR DESCRIPTION

Eligible patients from the NEXUS Clinics cohort with a diagnosis of hypertension sampled (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

#### NUMERATOR DESCRIPTION

The number of patients from the denominator whose most recent blood pressure (BP) recording was both systolic and diastolic values less than or equal to 140/90 (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

### Evidence Supporting the Measure

#### EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

#### NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure.](#)
- [VHA/DoD clinical practice guideline for the diagnosis and management of hypertension in the primary care setting.](#)

## Evidence Supporting Need for the Measure

### NEED FOR THE MEASURE

Use of this measure to improve performance  
Variation in quality for the performance measured

### EVIDENCE SUPPORTING NEED FOR THE MEASURE

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

## State of Use of the Measure

### STATE OF USE

Current routine use

### CURRENT USE

External oversight/Veterans Health Administration  
Internal quality improvement

## Application of Measure in its Current Use

### CARE SETTING

Ambulatory Care

### PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Advanced Practice Nurses  
Physician Assistants  
Physicians

### LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

### TARGET POPULATION AGE

Unspecified

### TARGET POPULATION GENDER

Either male or female

## STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

### Characteristics of the Primary Clinical Component

#### INCIDENCE/PREVALENCE

See "Rationale" field.

#### ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

#### BURDEN OF ILLNESS

See "Rationale" field.

#### UTILIZATION

Unspecified

#### COSTS

Unspecified

### Institute of Medicine National Healthcare Quality Report Categories

#### IOM CARE NEED

Living with Illness

#### IOM DOMAIN

Effectiveness

### Data Collection for the Measure

#### CASE FINDING

Users of care only

#### DESCRIPTION OF CASE FINDING

Eligible patients from the NEXUS Clinics cohort\*

\*Refer to the original measure documentation for patient cohort description.

## DENOMINATOR SAMPLING FRAME

Patients associated with provider

## DENOMINATOR INCLUSIONS/EXCLUSIONS

### Inclusions

Eligible patients from the NEXUS Clinics cohort with a diagnosis of hypertension sampled\*

\*Note:

Eligible Hypertension Patient: Meets NEXUS Clinics cohort selection criteria (refer to the original measure documentation for patient cohort description and sampling size strategy) AND primary or secondary diagnosis of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) code 401.0 (malignant hypertension), 401.1 (benign hypertension), or 401.9 (unspecified). A Medical Doctor/Doctor of Osteopathy (MD/DO), Physician Assistant (PA), or Nurse Practitioner (NP) must record hypertension as the patient's diagnosis. A diagnosis of 'borderline hypertension' is hypertension IF it is coded as hypertension and is being treated as hypertension, by recommended weight loss and/or recommended increase in physical activity, and/or prescription for medication such as a diuretic, beta-blocker, angiotensin-converting enzyme (ACE) inhibitor, angiotensin receptor blocker (ARB), or calcium channel blocker.

Active Diagnosis: The condition was ever diagnosed and there is not subsequent statement prior to the most recent outpatient visit, indicating the condition was resolved or is inactive.

### Exclusions

The ICD-9-CM codes above do not include pulmonary hypertension, that involves vessels of the brain and eye, or elevated blood pressure (BP).

## DENOMINATOR (INDEX) EVENT

Clinical Condition  
Encounter

## DENOMINATOR TIME WINDOW

Time window precedes index event

## NUMERATOR INCLUSIONS/EXCLUSIONS

### Inclusions

The number of patients from the denominator whose most recent blood pressure (BP) recording was both systolic and diastolic values less than or equal to 140/90\*

\*Most recent visit to one of the NEXUS Clinics AND seen by a Medical Doctor/Doctor of Osteopathy (MD/DO), Nurse Practitioner (NP), or Physician Assistant (PA), unless being seen for BP check only. If BP is taken more than once during that visit, lowest one is used. Lowest is determined by mean arterial pressure: (systolic + diastolic + diastolic) divided by 3.

### Exclusions

Patient self-report of BP is not accepted.

Note: If no BP was recorded during the past year, the result is assumed to be in poor control. Patient is included in the denominator but not the numerator.

#### NUMERATOR TIME WINDOW

Encounter or point in time

#### DATA SOURCE

Administrative and medical records data

#### LEVEL OF DETERMINATION OF QUALITY

Individual Case

#### OUTCOME TYPE

Clinical Outcome

#### PRE-EXISTING INSTRUMENT USED

Unspecified

### Computation of the Measure

#### SCORING

Rate

#### INTERPRETATION OF SCORE

Better quality is associated with a higher score

#### ALLOWANCE FOR PATIENT FACTORS

Unspecified

#### STANDARD OF COMPARISON

Internal time comparison  
Prescriptive standard

#### PRESCRIPTIVE STANDARD

Fiscal year (FY) 2005 targets for hypertension - blood pressure (BP) less than or equal to 140/90 (NEXUS Clinics):

- Facility Floor: 64%
- Meets Target: 72%

- Exceeds Target: 75%

#### EVIDENCE FOR PRESCRIPTIVE STANDARD

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

#### Evaluation of Measure Properties

#### EXTENT OF MEASURE TESTING

Unspecified

#### Identifying Information

#### ORIGINAL TITLE

Hypertension (HTN): Dx HTN - blood pressure good control.

#### MEASURE COLLECTION

[Fiscal Year \(FY\) 2005: Veterans Health Administration \(VHA\) Performance Measurement System](#)

#### MEASURE SET NAME

[Cardiovascular](#)

#### MEASURE SUBSET NAME

[Hypertension](#)

#### DEVELOPER

Veterans Health Administration

#### ADAPTATION

Measure was not adapted from another source.

#### RELEASE DATE

2001 Nov

#### REVISION DATE

2005 Mar

## MEASURE STATUS

Please note: This measure has been updated. The National Quality Measures Clearinghouse is working to update this summary.

## SOURCE(S)

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

## MEASURE AVAILABILITY

The individual measure, "Hypertension (HTN): Dx HTN - Blood Pressure Good Control," is published in "FY 2005 VHA Performance Measurement System: Technical Manual."

For more information contact:

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## NQMC STATUS

This NQMC summary was completed by ECRI on September 27, 2002. The information was verified by the Veterans Health Administration on October 29, 2002. This NQMC summary was updated by ECRI on December 7, 2004. The information was verified by the measure developer on December 10, 2004.

## COPYRIGHT STATEMENT

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